

### ABSTRACT

Methods and systems for processing uncalcined coke are provided. The methods and systems provide for combusting effluent gas from a refinery unit and  
5 a stream of uncalcined coke. The refinery unit effluent gas may be the offgas from a rotary kiln calciner. The refinery unit effluent gas and the uncalcined coke stream are combusted in an integrated gas/solids incinerator. Heat released during the combustion of these streams may be used to generate steam or electricity. The methods and systems disclosed provide low cost energy production at calciner  
10 effluent gas incinerator locations where uncalcined coke is available.